

IN THE CLAIMS

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1. In a network comprising a plurality of software controllable devices that communicate over said network, said software controllable devices including or coupled to a computer-readable storage medium, a distributed system for controlling said devices, comprising:

at least one control object, said control object residing in said computer readable-medium accessible to a respective software controllable device and including logical attributes of said respective device, said control object accepting and issuing control messages to and from said respective device, and said control object being polymorphic such that said control object is adapted to take on the logical attributes and command and control capabilities of any of said devices; and

a user interface adapted to receive said control object, retrieve said logical attributes, and accept and issue control messages to and from said control object, said user interface residing in at least one of said software controllable devices,

wherein when said control object is enabled, said control object registers with said distributed system, wherein said control object is active while said respective one of said devices is functioning, and wherein said control object maintains a list of all other registered control objects and their logical attributes.

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4. The system of claim 1, wherein said software controllable devices each include an operating system, said operating system including application programming interfaces to retrieve data from, and write data to, said control object.

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15. In a system for controlling a plurality of software controllable devices represented by a plurality of control objects that maintain a list of logical attributes of respective ones of said devices, said control object accepting and issuing control messages to and from said respective ones of said devices, and said control objects being polymorphic such that said control objects are adapted to take on the logical attributes and command and control capabilities of any of said devices, a method of registering said control objects, comprising:

broadcasting a control message from an enabled control object to inform other registered control objects that said enabled control object exists;

determining if said enabled control object is a first registered control object; and

appointing said first registered object as a manager object to administer said list.

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20. In a network comprising a plurality of software controllable devices that communicate over said network, said software controllable devices containing a computer-readable storage medium within which information is stored, a system for controlling said devices, comprising:

a plurality of control objects residing in said computer-readable medium of respective ones of said software controllable devices, said control objects including logical attributes of said respective ones of said devices, said control objects further accepting and issuing control messages to and from said respective ones of said devices, and said control objects being polymorphic such that said control objects are adapted to take on the logical attributes and command and control capabilities of any of said devices,

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wherein said control objects register with said system and is active while said respective ones of said devices are functioning, and wherein said control objects maintain a list of all other registered control objects and their logical attributes.

21. The system of claim 20, wherein said control objects are adapted to bind to any designed physical transport mechanism for communication with other control objects.

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28. In a network comprising at least one software controllable device that communicates over said network and is remotely controllable over said network, said software controllable device containing a computer-readable storage medium within which state information is stored, a system for controlling said device, comprising:

a control object residing in said computer-readable storage medium, said control object including said state information of said device, said control object further accepting and issuing control messages to and from said device, and said control object being polymorphic such that said control object is adapted to take on the logical attributes and command and control capabilities of any device attached to said network,

wherein said control object registers with said system and is active while said device is functioning, and wherein said control object maintain a list of any other control object registered with said system and their logical attributes.

29. The system of claim 28, wherein said control object is adapted to bind to any designed physical transport mechanism for communication with other control objects.